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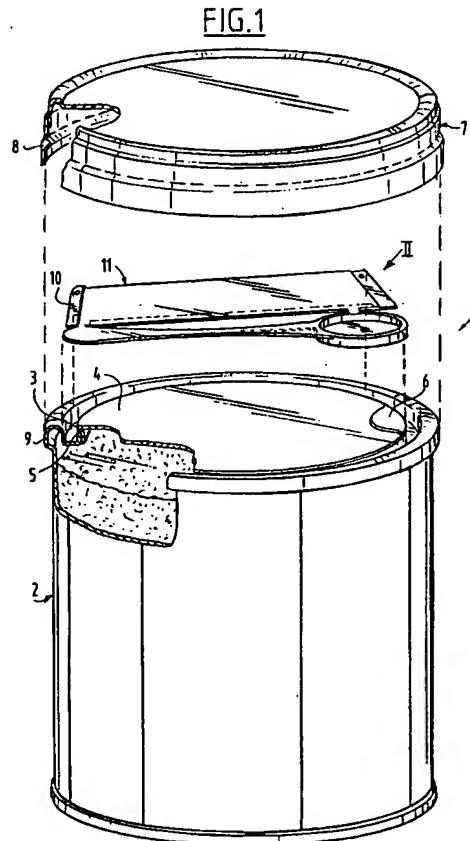
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⑳ Packaging with a folded measuring spoon, the measuring spoon and a cover provided with such a measuring spoon.

㉑ A packaging (1) comprises a holder (2) with an opening (3) which is closed by a removable foil (4), a cover which is mounted above the foil to define a space between the foil and the cover, a measuring spoon (11) which is located in the space between the foil and the cover, the spoon comprises a handle with an integral bowl bottom, the bowl bottom is intended for accommodating the separately formed side wall of the bowl.



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The present invention relates to a packaging which consists of a holder with an opening which prior to use of the contents is closed with a removable closing skin, a so-called tagger, and a cover which after removal of the closing skin takes over the function of closing the holder opening and further protects the closing skin against damage.

Such a packaging is often used for packaging material in particle form, particularly foodstuffs, such as milk powder, powdered soup and the like.

The packaging can consist of a metal holder, a glass holder, a plastic holder and the like.

Since the packaged contents are usually used in determined measured amounts, a measuring spoon is often supplied with this packaging. To ensure as far as possible that a packaging with a measuring spoon is ultimately supplied to the consumer, the measuring spoon is often arranged in the holder. This means that after breaking open the packaging the measuring spoon is buried under the contents of the packaging and is only found after the consumer has rummaged through the contents.

Many attempts have been made to incorporate the measuring spoon in the packaging such that it is directly available to the consumer when the packaging is broken open. The present invention has for its object to incorporate the measuring spoon in the packaging in an entirely different manner, and this in the space lying between the cover and the closing skin. When the contents of the packaging are broken open the measuring spoon is thus directly available to the consumer before the closing skin is removed. The measuring spoon cannot however be readily arranged into this disc-shaped space, because the spoon portion in particular of the measuring spoon has to have a relatively large capacity (about 5-25 ml) so that the spoon portion is of too large dimensions to be arranged in this disc-shaped space.

The invention is based on the insight that, despite the restricted, disc-shaped space that is present between the closing skin and the cover, a measuring spoon can nevertheless be arranged therein, without providing the closing skin or the cover with bulges, by making use of a substantially flat spoon portion which, after being bent round, is coupled to and supported by a spoon bottom which is connected to a spoon handle.

The packaging according to the invention is therefore characterized in that it comprises a holder having an end opening closable by a cover, which opening is closed with a removable closing skin, and having a measuring spoon for assembly located in a space between the cover and the closing skin, which spoon comprises a handle with a moulded on spoon bottom which is intended to receive a spoon portion for bending into a round shape.

In order to avoid the measuring spoon damaging or breaking through the closing skin, it is recommended that the spoon handle with the spoon bottom spans the opening and optionally supports on an opening rim via the closing skin. This opening rim can be an edge of a cover ring, or a neck edge of a glass holder. Any forces exerted by the flat-folded spoon portion are sustained via the spoon handle and the spoon bottom on the opening rim, so that the closing skin cannot be penetrated.

A particularly favourable measuring spoon, which does not have the problem of components thereof disappearing, results when the spoon handle, the spoon bottom and the spoon portion are preferably manufactured from one piece, for instance by injection moulding.

A very convenient packaging results if the measuring spoon is fixed in the cover in folded state. It is thus possible for the supplier of the packaging to arrange the closing skin and the cover, wherein the measuring spoon is already incorporated, onto the bottomless holder with existing apparatus. The filler finally carries out the filling and subsequently arranges the bottom. Such a cover with measuring spoon can be manufactured in only a small number of manufacturing operations, for example injection moulding operations, if the cover and the spoon handle with the spoon bottom are manufactured from one piece. Only one manufacturing operation is necessary if, as preferred, the cover and the measuring spoon are manufactured from one piece.

The spoon bottom and the bent round spoon portion can be mutually coupled in favourable manner if in preference the spoon bottom is provided with a standing peripheral edge. This coupling can be further improved if more preferably the interior size of the peripheral edge diverges towards the spoon bottom and the spoon portion is provided with a longitudinal edge of wedge-shaped section. Thus avoided as far as possible is an undesired disconnection of the spoon bottom from the spoon portion.

Although the spoon bottom can possess any non-angular disc shape, it is however recommended for coupling the spoon bottom and the spoon portion that the spoon bottom is circular disc-like.

According to a first embodiment the spoon portion is a material strip for bending round, the end edges of which are preferably coupled with co-acting coupling means arranged on the end edges. It is favourable if a number of coupling means are arranged over the breadth of the strip, i.e. over the height of the bent round spoon portion. Easy to form and reliably operating coupling means comprise a hook with a co-acting opening or eye.

If in preference the end edges are provided on

the strip surfaces remote from one another with corresponding rebates, the shape of the bent round spoon portion is disturbed as little as possible by the overlapping end edges because both rebates together have a thickness equal to the thickness of the material strip. To disturb the bent round spoon portion shape to the smallest possible extent it is therefore also recommended that the coupling means are arranged in the rebates.

According to another embodiment the spoon portion consists of a bent round material sleeve which can be brought by material tension or by shaping into its slightly conical, preferably substantially cylindrical form.

According to yet another embodiment of the packaging according to the invention the measuring spoon consists of a spoon bottom and a spoon portion together forming a partitioned disc, wherein the disc is preferably provided with co-acting coupling means along the dividing edges and preferably also along the peripheral edge of the disc.

In order to ensure that during arranging of the measuring spoon according to the invention in the packaging the risk of losing measuring spoon components is avoided as far as possible, it is recommended that the spoon bottom and the spoon portion are mutually joined via a material bridge and/or the handle and the spoon portion are mutually connected. It is further possible that the handle is folded with the spoon bottom onto the spoon portion and is handled and optionally even arranged in the cover of the packaging in this folded state.

The invention not only relates to the packaging with a folding measuring spoon according to the invention, but also to the measuring spoon itself and to a cover wherein this measuring spoon is fixed, for instance by glueing, or by moulding in a simultaneous manufacturing operation, such as for instance by injection molding.

Mentioned and other characteristics of the packaging, measuring spoon and cover according to the invention will become apparent and be further elucidated in the light of the description of a number of embodiments, with reference to the annexed drawings. In the drawings:

Figure 1 shows an exploded, partially broken away, perspective view of a packaging according to the invention;

figure 2 shows on a larger scale the measuring spoon according to the invention for assembly; figure 3 shows on a larger scale a section along the line III-III of figure 2;

figure 4 shows a section along the line IV-IV of figure 2;

figure 5 shows on a different scale a partially broken away perspective view from beneath of the assembled measuring spoon according to

the invention;

figure 6 shows a section along the line VI-VI of figure 5;

figures 7 and 8 show perspective, partially broken away views of other spoon portions according to the invention;

figures 9-11 each show a perspective view of other measuring spoons according to the invention for assembly;

figure 12 is a perspective, partially broken away view of an underside of a cover provided with a measuring spoon for assembly from figure 9; figure 13 is a perspective view corresponding with figures 7 and 8 of a sleeve-like spoon portion; and

figures 14 and 15 show respectively a top view and a perspective view of another measuring spoon according to the invention.

Figure 1 shows a packaging 1 according to the invention having a cylindrical, metal holder 2 with an end opening 3 which is closed off with an aluminium closing skin 4 that is a conventional closing skin. This closing skin rests on a holder rim 5 bent round towards the inside. The closing skin 4 is removable by pulling on a pull-tab 6. The end opening 3 can be closed with a plastic cover 7, which can be arranged closing over the holder 2, wherein an internal peripheral edge 8 snaps over an external rim 9 of the holder 2. Up to this point, a conventional packaging.

Arranged in the disc-shaped space between the cover 7 and the closing skin 4 is a plane 10. This plane 10 is a measuring spoon 11 according to the invention for assembly (see figure 5). The plane 10 has an external size such that it spans the end opening 3 and rests on the holder rim 5. Damage to the closing skin 4 is thus avoided, even when the measuring spoon 11 for assembly displays shaping bias.

Figures 2-6 show in more detail the measuring spoon 11 according to the invention. The measuring spoon 11 comprises a rigid handle 12 and a spoon bottom 13 moulded thereon and further a spoon portion 14, in this case a material strip for bending round which is connected via a flexible material bridge 15 to the spoon bottom 13. The handle 12 and the spoon portion 14 are mutually connected at the other side via a thin material bridge 16 which can be broken by being bent a number of times out of the plane of the plane.

The spoon bottom is provided with a standing peripheral edge 17 whereof an internal dimension A diverges toward the spoon bottom 13. In other words: the wall thickness of the peripheral edge 17 decreases in the direction towards the spoon bottom 13.

The spoon portion 14 is provided with a wedge-shaped lengthwise edge 18 which can co-

act with the wedge-shaped peripheral edge 17 of the spoon bottom 13.

The end edges 19 and 20 are further each provided with corresponding rebates 21 and 22 on which are arranged coupling means 23 for coupling the end edges 19 and 20.

For the measuring spoon 11 according to the invention the coupling means consist of a pin 24 arranged in the rebate 21 on the later inner surface of the spoon portion 14 and a hole 26 arranged in the rebate 22 located in the later outer surface 27 of the spoon portion 14.

The measuring spoon 11, which is shown in assembled state in figure 5, can be assembled as follows. The material bridge 15 is broken, whereafter both end edges 19 and 20 are carried towards one another as the spoon portion 14 is bent round. The rebates are laid one over the other, wherein the pin 24 is inserted into the hole 26. The thus resulting, circle cylindrical spoon portion 14 is pressed with the longitudinal edge 18 into the peripheral edge 17 of the spoon bottom 13, wherein the bridge 15 bends and for this movement is fixed to the spoon portion 14 at a position lying outside the longitudinal edge 18. The assembled measuring spoon 11 according to the invention maintains this form during scooping of material which can be easily discharged if the spoon bottom 13 is also provided with a small air hole 28.

Figure 7 shows a variant of a spoon portion 29 according to the invention wherein the rebate 31 is provided with a hooking member 30 that is formed out of a part of rebate 31 and an opening 33 that is formed in the rebate 32.

If necessary, a number of coupling means 23 as shown in figures 2-6 and figure 7 can be arranged over the breadth of the strip from which the spoon portion 14 or 29 is assembled, in other words over the height of the assembled spoon portion 14, 29.

Figure 8 shows yet another variant of a spoon portion 34 according to the invention wherein a rebate 35 is provided with a spine 36 which can be received in snap-in manner in a groove 37 arranged in a rebate 38.

Figure 9 shows a measuring spoon 40 according to the invention wherein the handle 12 with the spoon bottom 13 is folded onto the spoon portion 39 while the material bridge 15 is bent, wherein the folded state is locked by a hook 41 which is formed on the handle 12 and hooks behind an end edge 42 of the spoon portion 39. This folded measuring spoon 40 is easy to handle, transport and arrange in the space between cover 7 and closing skin 4.

Figure 10 shows yet another measuring spoon 43 according to the invention wherein a spoon portion 44 is connected to the handle 45 via a

material strip 46 which can be broken off at the break points 47 and 48 by moving the handle 45 and the spoon portion 44 relative to the bridge 46.

In the measuring spoon 49 according to the invention of figure 11 the spoon bottom 50 is joined via a rigid material bridge 51 to the edge 52 of spoon portion 63. The coupling means 23 moreover comprise in the rebate 53 hooking members 54 formed therein and therefrom which coact with holes 56 arranged in the rebate 55.

Figure 12 shows an assembly of a cover 57 having fixed therein via material strips 58 a measuring spoon 40 as shown in figure 9. These material strips can consist of the same material as the measuring spoon and the cover or of weld or glue points of a welding material or glueing material. By breaking the material strips 58 the measuring spoon is released and can be brought into the finished measuring spoon form by being folded out and assembled.

Figure 13 shows a spoon portion 59 with a sleeve form whereof also the peripheral edge 60 is wedge-shaped and intended for receiving in the peripheral edge 17 of the spoon bottom. By deforming this sleeve-form spoon portion 59 it can also be received in the slit-like space between the cover and the closing skin 4.

Figures 14 and 15 show another measuring spoon 61 according to the invention respectively in plano form and folded form. The handle 62 is moulded on a disc 64 which in the folded state forms the spoon bottom 65 and the spoon portion 66. The disc 64 is partitioned by an incision 67 which ends in the disc centre point 68 with a larger hole 69.

The coupling means 23 consist in this case of hooks 71 and 72 arranged in the peripheral edge of the disc 64 and the respective hook eyes 73 and 74. By bending the disc 64 round into a cone shape the hooks 71 and 72 can hook into the corresponding hook eyes 73 and 74, wherein the form shown in figure 15 results with a handle 62 that is slightly curved but thereby strengthened. The circle 75 in figure 14 indicates that the measuring spoon 61 rests on the holder rim 5 and therefore spans the closing skin 4.

This measuring spoon 61 can be manufactured from a metal, for example by stamping from a metal plate, whereby such a measuring spoon consists of one piece, is easy to assemble and whereby reinforcing ribs can be omitted, since in the assembled form the measuring spoon 61 assumes a form-retaining state.

In preference the measuring spoons according to the invention and the diverse components thereof are manufactured by injection moulding and, if desired, optionally in a single injection moulding operation with the forming of the cover.

It is further self-evident that the measuring spoons according to the invention can also be used in packagings in which no closing skin is incorporated, but wherein the advantage is nevertheless provided of the measuring spoon being available when the packaging is opened and rummaging in the packaging can be wholly avoided.

### Claims

1. Packaging comprising a holder with an end opening which is closable by a cover and which is closed off with a removable closing skin, and with a measuring spoon for assembly located in a space between the cover and the closing skin, which spoon comprises a handle with a moulded on spoon bottom which is intended for accommodating a spoon portion for bending round.

2. Packaging as claimed in claim 1, wherein the spoon bottom is provided with a standing peripheral edge.

3. Packaging as claimed in claim 2, wherein the internal size of the peripheral edge diverges towards the spoon bottom.

4. Packaging as claimed in claims 1-3, wherein the spoon bottom is disc-shaped.

5. Packaging as claimed in claim 4, wherein the spoon bottom is circular disc-like.

6. Packaging as claimed in claims 1-5, wherein the spoon bottom and the spoon portion form a partitioned disc.

7. Packaging as claimed in claim 6, wherein the disc is provided with coupling means.

8. Packaging as claimed in claims 1-5, wherein the spoon portion is a material strip for bending round.

9. Packaging as claimed in claim 7 or 8, wherein the edges of the disc or of the strip are provided with co-acting coupling means.

10. Packaging as claimed in claim 9, wherein along the peripheral edge of the disc or over the breadth of the strip is arranged a number of coupling means.

11. Packaging as claimed in claim 9 or 10, wherein the coupling means comprise at least one hook and a co-acting opening.

12. Packaging as claimed in claims 7-11, wherein the edges on the disc surfaces or strip surfaces remote from each other are provided with corresponding rebates.

13. Packaging as claimed in claims 7-12, wherein the coupling means are arranged in the rebates.

14. Packaging as claimed in claims 1-5, wherein the spoon portion is a material sleeve for bending round.

15. Packaging as claimed in claims 3-5 and 8-14, wherein the spoon portion is provided with a longitudinal edge of wedge-shaped section.

16. Packaging as claimed in claims 1-3 and 8-15, wherein the spoon bottom and the spoon portion are mutually connected via a material bridge.

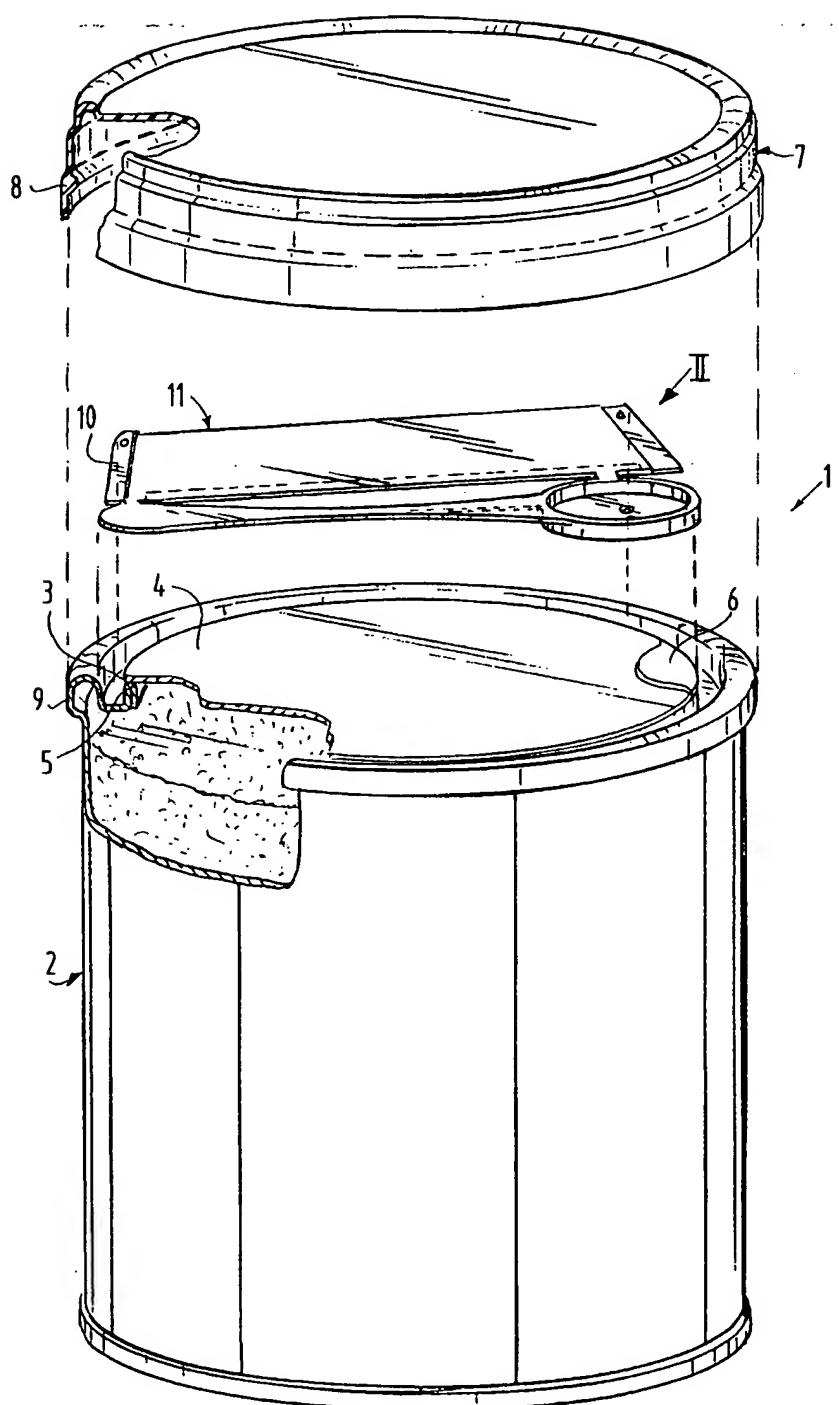
17. Packaging as claimed in claims 1-16, wherein the handle and the spoon portion are mutually connected.

18. Measuring spoon as claimed in claims 1-17.

19. Cover provided with a measuring spoon as claimed in claim 18.

20. Cover as claimed in claim 19 evidently intended for use in a packaging as claimed in claims 1-17.

FIG.1



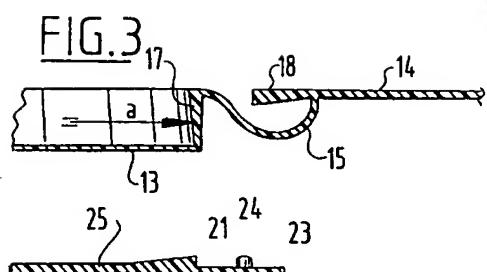
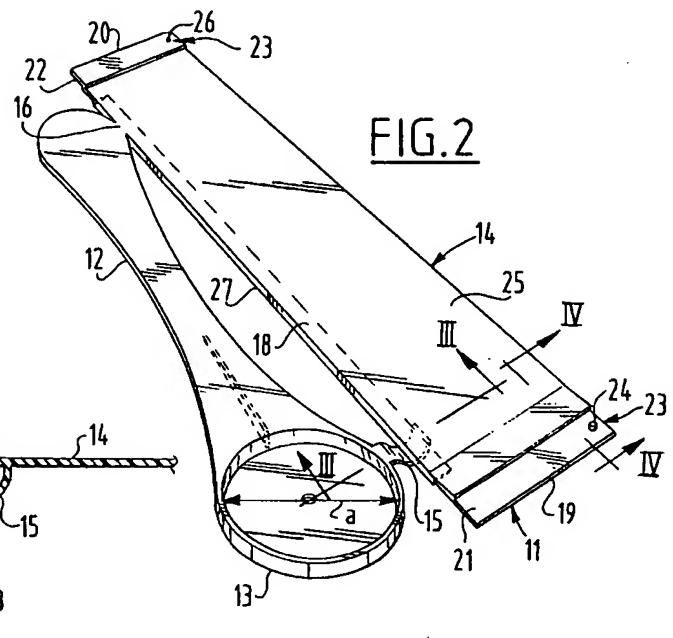


FIG. 4

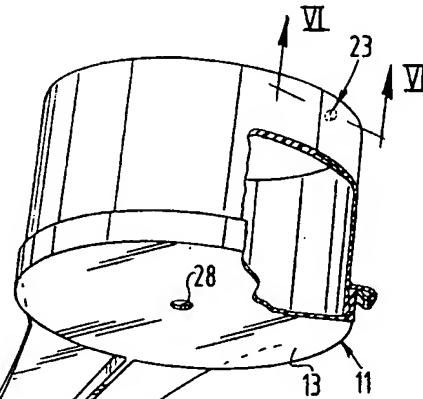


FIG. 5

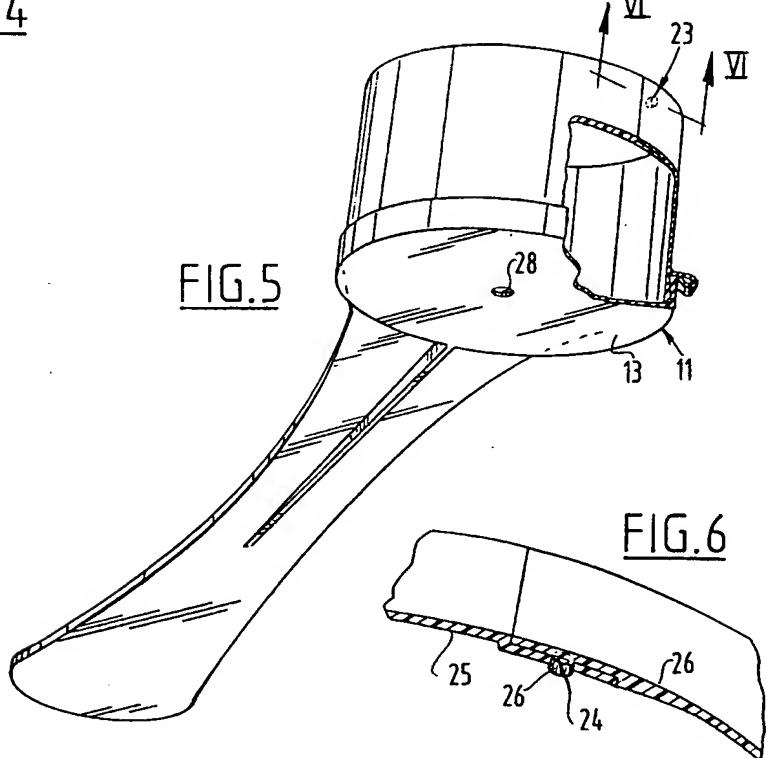
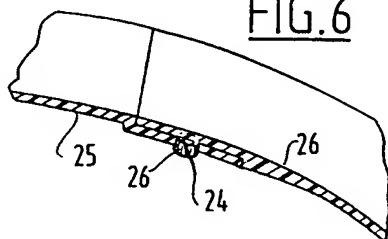
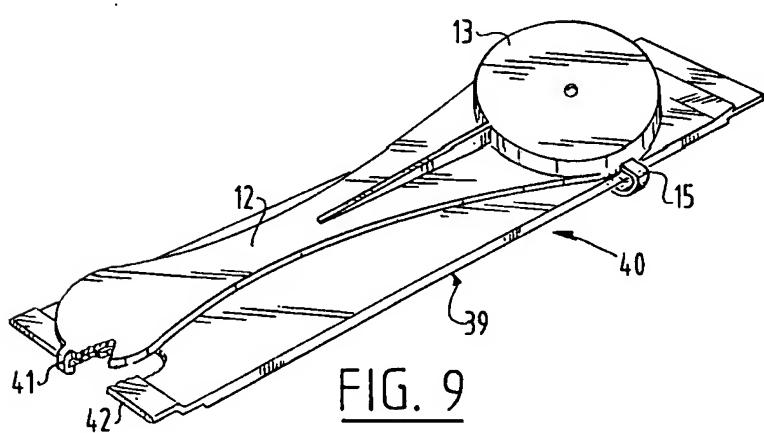
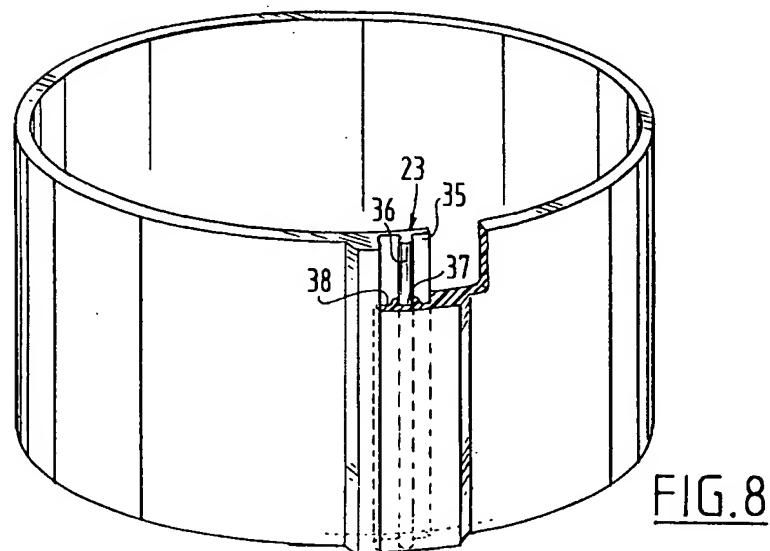
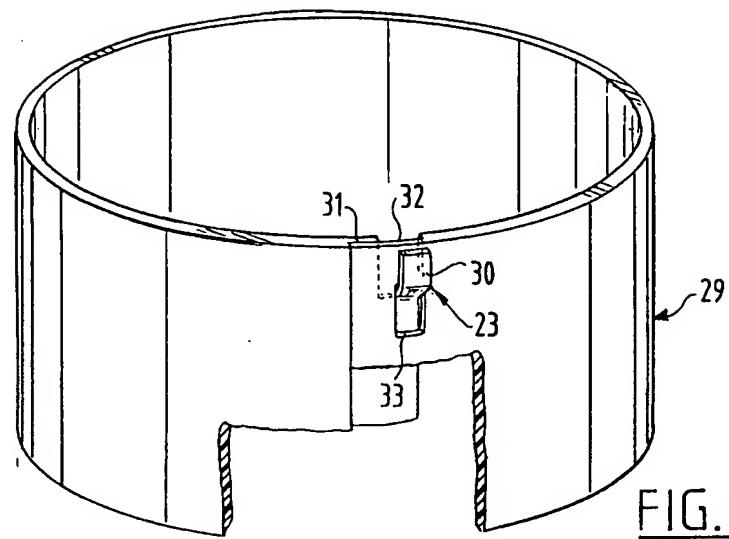
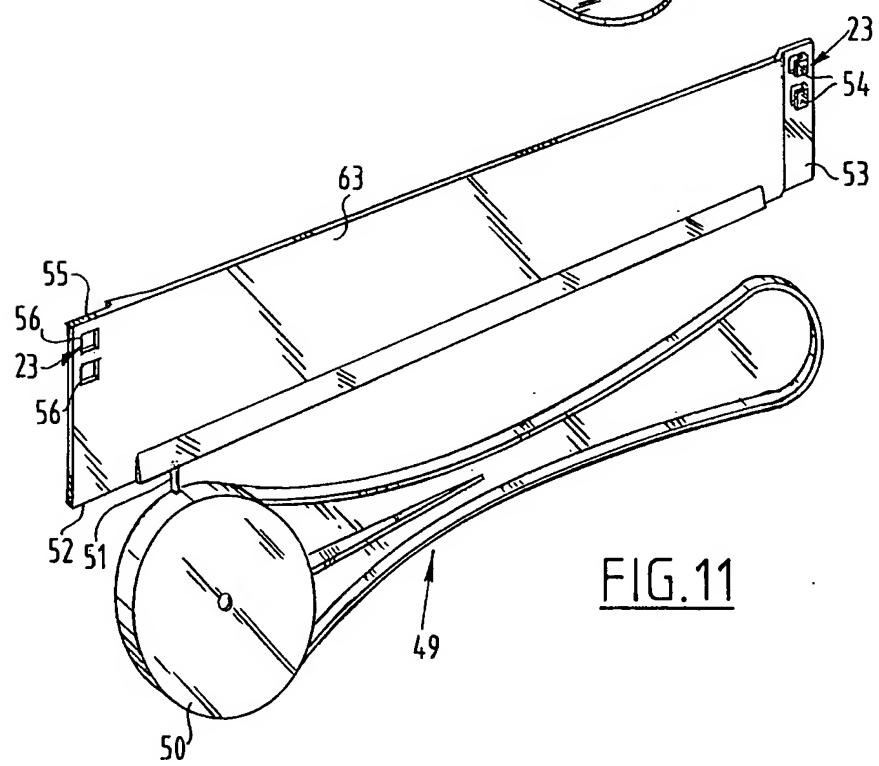
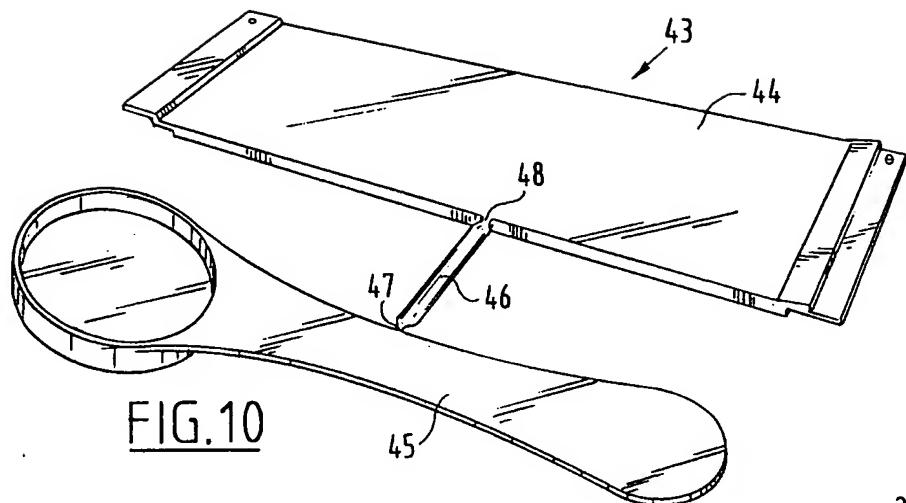


FIG. 6







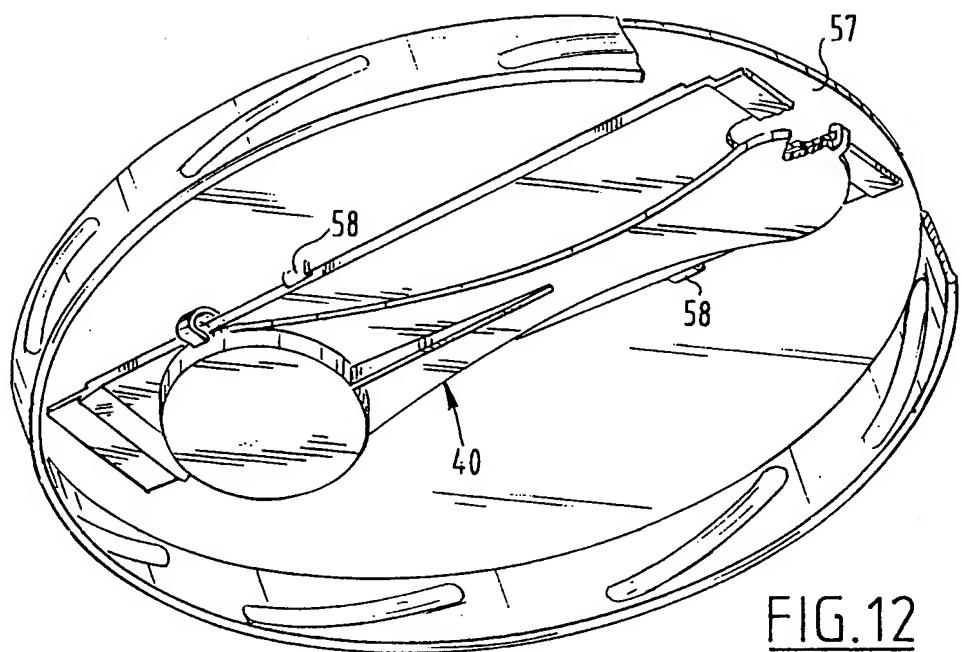


FIG.12

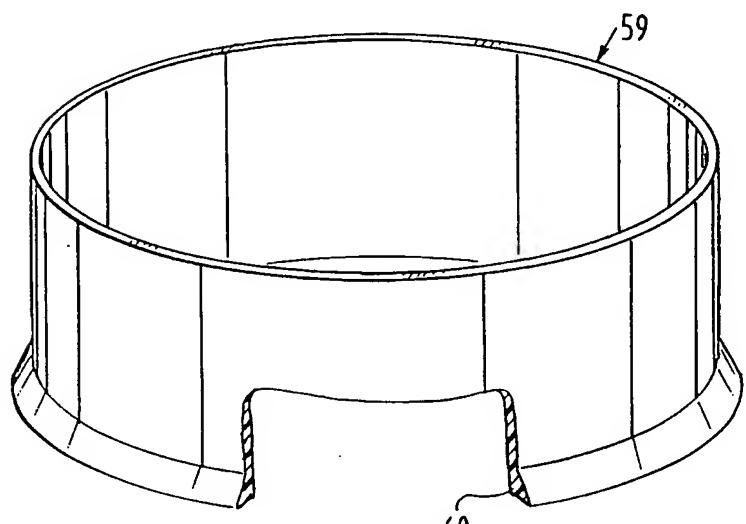


FIG.13

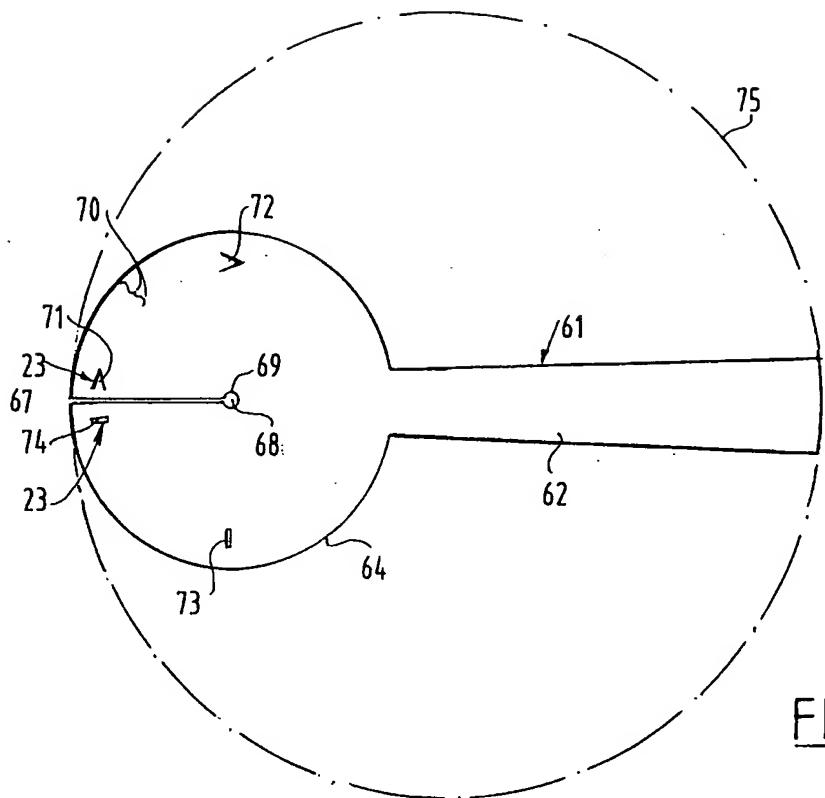


FIG.14

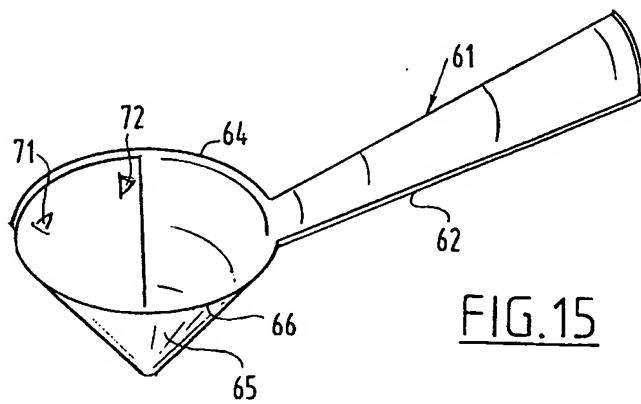


FIG.15



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## EUROPEAN SEARCH REPORT

Application Number

EP 91 20 1444

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. CL.5)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	EP-A-0 400 708 (THOMASSEN & DRIJVER-VERBLIFA N.V.) * column 4, line 57 - column 6, line 6 * * figures 1-9 * ---	1-20	B65D77/24 B65D51/24
A	FR-A-1 280 021 (STEVENS ET AL.) * page 1, right column, line 26 - page 2, left column, line 23 * * figures 1,2 *	1	
A	GB-A-1 349 332 (FIRST DYNAMICS) * page 1, line 34 - line 77 * * figure 5 *	1	
A	DE-U-8 908 305 (NOVOPLAST-VERPACKUNGEN GMBH) * page 6, line 5 - line 25 * * figure 1 *	1	
A	FR-A-897 092 (ARNAUDIES) * page 1, line 1 - line 21 * * figure 2 *	6	
E	NL-A-9 000 583 (THOMASSEN & DRIJVER-VERBLIFA N.V.) * the whole document *	1-20	TECHNICAL FIELDS SEARCHED (Int. CL.5)  B65D A47G
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	02 MARCH 1992	SMOLDERS R.C.H.	
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